



Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	13	Attorney Docket Number	62-226-1
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**Complete if Known**

Application Number	09/225,687
Filing Date	01/06/1999
First Named Inventor	Mills
Group Art Unit	1754 1745
Examiner Name	Tsang KALAFIT

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	58	R. L. Mills, "Classical Quantum Mechanics," Physics Essays, Vol. 16, No. 4, December (2003), pp. 433-498. (Web Publication Date: May 23, 2002.)	T <sup>2</sup>
	60	R. L. Mills, J. Sankar, A. Voigt, J. He, B. Dhandapani, "Synthesis of HDLC Films from Solid Carbon," Journal of Materials Science, in press. (Web Publication Date: May 3, 2002.)	
	77	J. Phillips, R. L. Mills, X. Chen, "Water Bath Calorimetric Study of Excess Heat in 'Resonance Transfer' Plasmas," J. Appl. Phys., Vol. 96(No. 6), (2004) 3095-3102. (Web Publication Date: June 16, 2003.)	
	80	R. L. Mills, "The Fallacy of Feynman's Argument on the Stability of the Hydrogen Atom According to Quantum Mechanics," Annales de la Fondation Louis de Broglie, submitted. (Web Publication Date: Jan. 27, 2003.)	
	81	R. Mills, P. Ray, B. Dhandapani, W. Good, P. Jarissson, M. Nansteel, J. He, A. Voigt, "Spectroscopic and NMR Identification of Novel Hydride Ions in Fractional Quantum Energy States Formed by an Exothermic Reaction of Atomic Hydrogen with Certain Catalysts," European Physical Journal: Applied Physics, 28, (2004), 83-104. (Web Publication Date: Feb. 21, 2003.)	
(80)	88	R. Mills, J. Sankar, A. Voigt, J. He, P. Ray, B. Dhandapani, "Role of Atomic Hydrogen Density and Energy in Low Power CVD Synthesis of Diamond Films," Thin Solid Films, 478, (2005) 77-90. (Web Publication Date: Dec. 22, 2003.)	
	94	R. L. Mills, "The Nature of the Chemical Bond Revisited and an Alternative Maxwellian Approach," Physics Essays, in press. (Web Publication Date: Aug. 6, 2003.)	
	96	J. J. Phillips, C.K. Chen, R. L. Mills, "Evidence of the Production of Hot Hydrogen Atoms in RF Plasmas by Catalytic Reactions Between Hydrogen and Oxygen Species," Spectrochimica Acta Part B: Atomic Spectroscopy, submitted. (Web Publication Date: Sept. 12, 2003.)	
	97	R. L. Mills, P. Ray, B. Dhandapani, "Evidence of an Energy Transfer Reaction Between Atomic Hydrogen and Argon II or Helium II as the Source of Excessively Hot H Atoms in RF Plasmas," Journal of Plasma Physics, in press. (Web Publication Date: Sept. 26, 2003.)	
	98	R. L. Mills, Y. Lu, J. He, M. Nansteel, P. Ray, X. Chen, A. Voigt, B. Dhandapani, "Spectral Identification of New States of Hydrogen," New Journal of Chemistry, submitted. (Web Publication Date: Nov. 18, 2003.)	

Examiner Signature	<i>[Signature]</i>	Date Considered	4/27/06
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		Group Art Unit	4754 1748
		Examiner Name	Tsang KALAPUT
Sheet	2	13	Attorney Docket Number 62-226-I

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
	100	R. Mills, B. Dhandapani, J. He, "Highly Stable Amorphous Silicon Hydride from a Helium Plasma Reaction," Materials Chemistry and Physics, submitted. (Web Publication Date: Nov. 17, 2003.)		
	101	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Chemistry of Solid, Liquid, and Gaseous Fuels, 227th American Chemical Society National Meeting, March 28-April 1, 2004, Anaheim, CA.		
	102	R. L. Mills, "Exact Classical Quantum Mechanical Solutions for One- through Twenty-Electron Atoms," Phys. Essays, submitted. (Web Publication Date: April 22, 2004.)		
	103	R. L. Mills, Dhandapani, W. Good, J. He, "New States of Hydrogen Isolated from K <sub>2</sub> CO <sub>3</sub> Electrolysis Gases," Electrochim. Acta, submitted. (Web Publication Date: April 28, 2004.)		
	104	R. L. Mills, Y. Lu, M. Nansteel, J. He, A. Voigt, W. Good, B. Dhandapani, "Energetic Catalyst-Hydrogen Plasma Reaction as a Potential New Energy Source," Division of Fuel Chemistry, Session: Advances in Hydrogen Energy, 228th American Chemical Society National Meeting, August 22–26, 2004, Philadelphia, PA.		
<i>(initials)</i>	113	R. Mills, "Physical Solutions of the Nature of the Atom, Photon, and Their Interactions to Form Excited and Predicted Hydrino States", New Journal of Physics, submitted.		
<i>(initials)</i>	114	R. Mills, K. Akhtar, B. Dhandapani, "Tests of Features of Field-Acceleration Models for the Extraordinary Selective H Balmer $\alpha$ Broadening in Certain Hydrogen Mixed Plasmas," Journal of Applied Physics, submitted. (web publication June 24, 2005, www.blacklightpower.com).		

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OK	105	J. Phillips, C. K. Chen, R. L. Mills, "Evidence of Catalytic Production of Hot Hydrogen in RF-Generated Hydrogen/Argon Plasmas," J. Appl. Physics, submitted. (Web Publication Date: September 7, 2004.)			
	106	R. L. Mills, "Exact Classical Quantum Mechanical Solution for Atomic Helium which Predicts Conjugate Parameters from a Unique Solution for the First Time," Foundations of Science, submitted. (Web Publication Date: October 28, 2004.)			
	107	R. L. Mills, "Maxwell's Equations and QED: Which is Fact and Which is Fiction," Physica Scripta, submitted. (Web Publication Date: October 28, 2004.)			
SK	108	R. L. Mills, J. He, M. Nansteel, B. Dhandapani, "Catalysis of Atomic Hydrogen to New Hydrides as a New Power Source," International Journal of Global Energy Issues (IJGEI). Special Edition in Energy System, submitted. (Web Publication Date: April 4, 2005.)			
OK	109	R. L. Mills, M. Nansteel, J. He, B. Dhandapani, "Low-Voltage EUV and Visible Light Source Due to Catalysis of Atomic Hydrogen," J. Plasma Physics, submitted. (Web Publication Date: April 15, 2005.)			
OK	110	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source," Prepr. Pap.—Am. Chem. Soc., Div. Fuel Chem. 2005, 50(2). (Web Publication Date: April 22, 2005.)			
SK	111	R. L. Mills, J. He, Z. Chang, W. Good, Y. Lu, B. Dhandapani, "Catalysis of Atomic Hydrogen to Novel Hydrogen Species H <sup>1/4</sup> and H <sub>2</sub> <sup>1/4</sup> as a New Power Source," Thermochimica Acta, submitted. (Web Publication Date: May 6, 2005.)			
OK	112	R. L. Mills, J. He, Y. Lu, Z. M. Nansteel, Chang, B. Dhandapani, "Comprehensive Identification and Potential Applications of New States of Hydrogen," Central European Journal of Physics, submitted. (Web Publication Date: May 9, 2005.)			

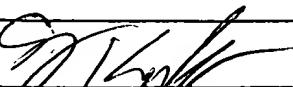
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				Examiner Name	TSANG KALAGT
Sheet	4	of	13	Attorney Docket Number	62-226-I

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OK		CRITCHLEY et al., "Energy shifts and forbidden transitions in H <sub>2</sub> due to electronic g/u symmetry breaking", <i>Molecular Physics</i> , 2003, Vol. 101, Nos. 4-5, pp. 651-661, Taylor & Francis Ltd. (No Month)			
OK		GAMBUS et al., "Spectroscopic Study or Low-Pressure Water Plasmas and Their Reactions with Liquid Hydrocarbons", <i>Energy &amp; Fuels</i> , 2002, 16, pp. 172-176, American Chemical Society (No Month)			
OK		CVETANOVIC et al., "Excessive Balmer line broadening in a plane cathode abnormal glow discharge in hydrogen", <i>Journal of Applied Physics</i> , 97, 033302 (2005), American Institute of Physics (No Month)			
OK		AKATSUKA et al., "Stationary population inversion of hydrogen in an arc-heated magnetically trapped expanding hydrogen-helium plasma jet", <i>Physical Review E</i> , 49, 2, pp. 1534-1544, February, 1994, The American Physical Society			
OK		MURAKAMI et al., "Chemisorption of hydrogen into a graphite-potassium intercalation compound C <sub>6</sub> K studied by means of positron annihilation", <i>J. Chem. Phys.</i> , 62 (10), May 15, 1995, American Institute of Physics			
OK		AHN, "Hydrogen Storage in Metal-Modified Single-Walled Carbon Nanotubes", Division of Engineering and Applied Science, California Institute of Technology, September 15, 2001			
OK		DUAN et al., "Numerical calculation of energies of some excited states in a helium atom", <i>Eur. Phys. J.</i> , D 19, (2002), pp. 9-12, Societa Italiana di Fisica, Springer-Verlag 2002 (No Month)			
OK		NIXON et al., "Formation and structure of the potassium graphites", <i>Brit. J. Appl. Phys.</i> , Ser. 2, Vol., 1, pp. 291-299, Great Britain, 2002 (No Month)			
OK		ZELLINGER, "Experiment and the foundations of quantum physics", <i>Reviews of Modern Physics</i> , Vol 71, No. 2, pp. S288-S297, Centenary 1999, The American Physical Society (No Month)			

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OK		COTTON et al., "Complexes of Cyclic 2-Oxacarbenes, I. A Spontaneous Cyclization to Form a Complex of 2-Oxacyclopentylidene", <i>Journal of the American Chemical Society</i> , 93:11, pp. 2672-2676, June 2, 1971			
OK		LINDSAY et al., "A remeasurement of the 2.4μm spectrum of J = H <sub>2</sub> pairs in a parahydrogen crystal", <i>Journal of Molecular Spectroscopy</i> , 218, Pp. 131-133, 2003	(NP/Jan/04)		
OK		JUAREZ et al., "Photoelectron angular distributions of rotationally resolved states in para-H <sub>2</sub> <sup>+</sup> : A closer to the dynamics of molecular photoionisation", The University of Manchester Atomic, Molecular & Laser Manipulation Group, pp.1-5	(No Date)		
OK		WEISSTEIN, "Ortho-Para Hydrogen", <a href="http://scienceworld.wolfram.com/physics/Ortho-ParaHydrogen.html">http://scienceworld.wolfram.com/physics/Ortho-ParaHydrogen.html</a>	(No Date)		
OK		SMITH, "Infrared spectra of BO <sub>2</sub> <sup>-</sup> in the alkali halides-L. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , Vol. 30A, pp. 875-882, Pergamon Press, 1974	(No Date)		
OK		LEITCH et al., "Raman Spectroscopy of Hydrogen Molecules in Crystalline Silicon", <i>Physical Review Letters</i> , 81:2, pp. 421-424, July 13, 1998, The American Physical Society			
OK		CHEN et al., "Key to Understanding Interstitial H <sub>2</sub> in Si", <i>Physical Review Letters</i> , 88:10, pp. 105507-1 - 105507-4, March 11, 2002, The American Physical Society			
OK		CHEN et al., "Rotation of Molecular Hydrogen in Si: Unambiguous Identification of Ortho-H <sub>2</sub> and Para-D <sub>2</sub> ", <i>Physical Review Letters</i> , 88:24, pp. 245503-1 - 245503-4, June 17, 2002, The American Physical Society			
OK		LAVROV et al., "Ortho and Para Interstitial H <sub>2</sub> in Silicon", <i>Physical Review Letters</i> , 89:21, pp. 215501-1 - 215501-4, November 18, 2002, The American Physical Society			
OK		STAVOLA et al., "Interstitial H <sub>2</sub> in Si: are all problems solved?", <i>Physica B</i> , pp. 58-66, 2003, Elsevier B.V.	(2003, NO MONTH)		

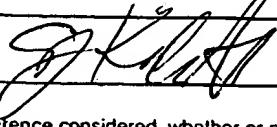
Examiner Signature	<i>SJ Kryh</i>	Date Considered	4/27/06
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Sheet	6	of	13	Attorney Docket Number	62-226-I

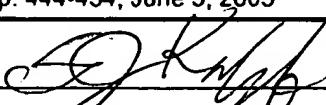
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OK		MILLS et al., "Catalysis of Atomic Hydrogen to Novel Hydrides as a New Power Source", pp. 1-8, BlackLight Power, Inc.	(No DATE)		
OK		DECIUS et al., "Force Constants of the Metaborate Ion in Alkali Halides", <i>The Journal of Chemical Physics</i> , 56:10, pp. 5189-5190, May 15, 1972			
OK		"Infrared spectra of the metaborate ion in alkali halide solid solution", <i>Research Notes</i> , pp. 600-602	(1971, NO M ON TH)		
OK		SMITH, "Anharmonic force field of the metaborate ion in alkali halides", <i>The Journal of Chemical Physics</i> , 58:11, pp. 4776-4778, June 1, 1973			
OK		HISATSUNE et al., "Infrared Spectra of Metaborate Monomer and Trimer Ions", <i>Inorganic Chemistry</i> , pp. 168-174	(NO M ON TH)		
OK		JONES et al., "Force Constants of Nickel Carbonyl from Vibrational Spectra of Isotopic Species", <i>The Journal of Chemical Physics</i> , 48:6, pp. 2663-2670, March 15, 1968			
OK		SMITH, "Infrared spectra of BO <sub>2</sub> -in the alkali halides-I. Potassium and rubidium halides", <i>Spectrochimica Acta</i> , 30A, pp. 875-882, 1974, Pergamon Press	(NB 1974)		
OK		SCHOENFELDER et al., "Kinetics of Thermal Decomposition of TiH <sub>2</sub> ", <i>J. Vac. Sci. Technol.</i> , 10:5, pp. 862-870, Sept./Oct. 1973			
OK		"Emission Characteristics for Scandium Type Dispenser Cathodes", HeatWave Labs, Inc., TB-119, May 24, 2001, Spectra-Mat, Inc.			
OK		"Emission Characteristics of 'M Type' Dispenser Cathodes", HeatWave Labs, Inc., TB-117, May 24, 2001, Spectra-Mat, Inc.			
OK		"Practical Aspects of Modern Dispenser Cathodes", <i>Microwave Journal</i> , September, 1979			

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<u>OK</u>		"Standard Series Barium Tungsten Dispenser Cathodes", HeatWave Labs, Inc., TB-198, July 29, 2002, Spectra-Mat, Inc.			
<u>OK</u>		ABATE et al., "Optimization and enhancement of H <sup>+</sup> ions in a magnetized sheet plasma", <i>Review of Scientific Instruments</i> , 71:10, pp. 3689-3695, October 2000, American Institute of Physics			
<u>OK</u>		CHABERT et al., "On the influence of the gas velocity on dissociation degree and gas temperature in a flowing microwave hydrogen discharge", <i>Journal of Applied Physics</i> , 84:1, pp. 161-167, July 1, 1998, American Institute of Physics			
<u>OK</u>		GORDON et al., "Energy coupling efficiency of a hydrogen microwave plasma reactor", <i>Journal of Applied Physics</i> , 89:3, pp. 1544-1549, February 1, 2001, American Institute of Physics			
<u>OK</u>		RADOVANOV et al., "Time-resolved Balmer-alpha emission from fast hydrogen atoms in low pressure, radio-frequency discharges in hydrogen", <i>Appl. Phys. Lett.</i> , 66:20, pp. 2637-2639, May 15, 1995			
<u>OK</u>		DJUROVIC et al., "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics			
<u>OK</u>		KONJEVIC, "Plasma Broadening and Shifting of Non-Hydrogenic Spectral Lines: Present Status and Applications", <i>Physics Reports</i> , 315, pp. 339-401, 1999, Elsevier			
<u>OK</u>		BENESCH et al., "Line shapes of atomic hydrogen in hollow-cathode discharges", <i>Optics Letters</i> , 9:8, pp. 338-340, August 1984, Optical Society of America			
<u>OK</u>		AYERS, et al., "Shapes of atomic-hydrogen lines produced at a cathode surface", <i>Physical Review A</i> , 37:1, pp. 194-200, January 1, 1988, The American Physical Society			
<u>OK</u>		ADAMOV, et al., "Doppler Spectroscopy of Hydrogen and Deuterium Balmer Alpha Line in an Abnormal Glow Discharge", <i>IEEE Transactions on Plasma Science</i> , 31:3, pp. 444-454, June 3, 2003			
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(SK)		JOVICEVIC et al., "Excessive Balmer line broadcasting in microwave-induced discharges", <i>Journal of Applied Physics</i> , 95:1, pp. 24-29, January 1, 2004, American Institute of Physics			
(SK)		DJUROVIC et al., "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge", <i>J. Appl. Phys.</i> , 74:11, pp. 6558-6565, December 1, 1993, American Institute of Physics			
(SK)		MAYO, "Thermalization and Energy Distribution in Cold Laboratory Plasmas Comments on the Possibility of Mono-Energetic Species", April 20, 2004			
(SK)		VIDENOVIC et al., "Spectroscopic investigations of a cathode fall region of the Grimm-type glow discharge", <i>Spectrochimica Acta Part B</i> , 51, pp. 1707-1731, 1996			(No M/A)
(SK)		BARBEAU et al., "Spectroscopic investigation of energetic atoms in a DC hydrogen flow discharge, pp. 1168-1174, 1990 IOP Publishing Ltd.			(No M/A)
(SK)		KONJEVIC et al., "Emission Spectroscopy of the Cathode Fall Region of an Analytical Glow", <i>J. Phys. IV France</i> , 7, pp. C4-247-C4-258, October 1997			
(SK)		LIFSHITZ et al., "Resonance absorption measurements of atom concentrations in reacting gas mixtures. I. Shapes of H and D Lyman- $\alpha$ lines from microwave sources", <i>J. Chem. Phys.</i> , 70:12, pp. 5607-5613, June 15, 1979, American Institute of Physics			
(SK)		KURAICA et al., "Line shapes of atomic hydrogen in a plane-cathode abnormal glow discharge", <i>Physical Review A</i> , 46:7, pp. 4429-4432, October 1, 1992, The American Physical Society			
(SK)		KURAICA et al., "On the Atomic Hydrogen Line Shapes in a Plane-Cathode Obstructed Glow Discharge", <i>Physica Scripta</i> , 50, pp. 487-492, 1994			(No M/A)

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<i>SK</i>		OLTHOFF et al., "Studies of Ion Kinetic-Energy Distributions in the Gaseous Electronics Conference RF Reference Cell", <i>Journal of Research of the National Institute of Standards and Technology</i> , 100:4, pp. 383-400, July-August 1995		T <sup>2</sup>
<i>SK</i>		RADOVANOV et al., "Ion kinetic-energy distributions and Balmer-alpha ( $H_{\alpha}$ ) excitation in Ar-H <sub>2</sub> radio-frequency discharges", <i>J. Appl. Phys.</i> , 78:2, pp. 746-756, July 15, 1995		
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				Application Number	09/225,687
				Filing Date	01/06/1999
				First Named Inventor	Mills
				Group Art Unit	1754 / 745
				Examiner Name	Isang KALAFAT
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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
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				Examiner Name	Tsang-KALARI
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				First Named Inventor	Mills
				Group Art Unit	4754 / 745
				Examiner Name	Tsang KALAYIT
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				Examiner Name	Tsang Foster, Susy KALAFUT
Sheet	13	13		Attorney Docket Number	62-226-1

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